ELSEVIER

Surface Science 324 (1995) 373–375

surface science

Author index

Aizawa, N., see Homma 324 (1995) L333
Aizawa, T., see Souda 324 (1995) L349
Aruga, T., K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

Barbier, L., see Masson 324 (1995) L378
Barkema, G.T., see Biham 324 (1995) 47
Behm, R.J., see Wiederholt 324 (1995) 91
Bellier, J.P., see Pourmir 324 (1995) L337
Besenbacher, F., see Sprunger 324 (1995) L321
Biham, O., G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47
Billing, G.D., see Hansen 324 (1995) 55
Bohnen, K.P., see Schöchlin 324 (1995) 113
Breeman, M., see Biham 324 (1995) 47
Brune, H., see Wiederholt 324 (1995) 91
Burghgraef, H., A.P.J. Jansen and R.A. van Santen, Methane activation and dehydrogenation on nickel and cobalt: a computational study 324 (1995) 345

Chen, W. and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169
Chung, J.W., see Kim 324 (1995) 8
Cousty, J., see Masson 324 (1995) L378
Cowie, B.C.C., see Kadodwala 324 (1995) 122

Davis, A.A., see Kadodwala 324 (1995) 122
de Beauvais, C., D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of $c(2 \times 2)$-Pb/Cu(110) 324 (1995) 1
DeLouise, L.A., Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233
Dudarev, S.L., D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
Duszak, R., F. Ohtani, Y. Kadowaki and H. Nozoye, Quantitative determination of the imperfectness of a cleaved MoS_2(001) surface by coaxial impact-collision ion scattering 324 (1995) 257

Ertl, G., see Wiederholt 324 (1995) 91

Fujishima, A., see Yang 324 (1995) L363
Fukui, K., see Aruga 324 (1995) 17
Funtikov, A.M., U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343

Gauthier, S., see Pourmir 324 (1995) L337
Gavrilenko, V.I. and A.I. Shkrebtii, Anisotropy of optical reflectance of the (001) surface of diamond 324 (1995) 226
Ge, M. and A.A. Gewirth, In situ atomic force microscopy of under- and overpotentially deposited cadmium on Cu(111) 324 (1995) 14
Gewirth, A.A., see Ge 324 (1995) 14
Gilbert, R.G., see Pitt 324 (1995) 69
Goonewardene, A., see Qu 324 (1995) 133

Hager, J. and H. Spohn, Self-similar morphology and dynamics of periodic surface profiles below the roughening transition 324 (1995) 365
Hamers, R.J., see Higgins 324 (1995) 263
Hammer, L., see Schmiedl 324 (1995) 289
Hansen, F.Y., N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55
Hashimoto, K., see Yang 324 (1995) L363
Hayami, W., see Souda 324 (1995) L349
Heinz, K., see Schmiedl 324 (1995) 289
Henriksen, N.E., see Hansen 324 (1995) 55
Hibino, H., see Homma 324 (1995) L333
Higgins, S.R. and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263
Ho, K.M., see Schöchlin 324 (1995) 113
Homma, Y., H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7×7) domains on Si(111) in solid phase epitaxy 324 (1995) L333
Huang, L.J., see Xia 324 (1995) 159
Hugenschmidt, M.B., see Verheij 324 (1995) 185

Imanishi, A., see Yokoyama 324 (1995) 25
Ishizawa, Y., see Souda 324 (1995) L349
Ito, K., S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectroscopy of surface micro-structures on granular Au films 324 (1995) 282
Iwasawa, Y., see Aruga 324 (1995) 17

Jansen, A.P.J., see Burghgraef 324 (1995) 345
Jiang, Q. and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1×1 films 324 (1995) 357
Jones, R.G., see Kadodwala 324 (1995) 122
Jónsson, H., see Villarba 324 (1995) 35
Jónsson, H., see Mills 324 (1995) 305

Kadodwala, M.F., A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122
Kadowaki, Y., see Duszak 324 (1995) 257
Kampen, T.U., see Nienhaus 324 (1995) L328
Kampen, T.U., see Schmitsdorf 324 (1995) 249
Kang, H.J., see Lee 324 (1995) 338
Karunamuni, J., see Qu 324 (1995) 133
Kerkar, M., see Kadodwala 324 (1995) 122
Kim, C.Y., K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8
Kim, K.J., see Lee 324 (1995) 338
Kim, Y.S., see Lee 324 (1995) 338
Kitajima, Y., see Yokoyama 324 (1995) 25
Klein, J., see Pourmir 324 (1995) L337
Koma, A., see Nishida 324 (1995) 149
Kurtz, R.L., see Qu 324 (1995) 133

Lambert, R.M., see Schroeder 324 (1995) L371
Landheer, D., see Xia 324 (1995) 159
Lau, W.M., see Xia 324 (1995) 159
Lecoeur, J., see Pourmir 324 (1995) L337
Lee, J.C., H.J. Kang, K.J. Kim, Y.S. Kim and D.W. Moon, Oxygen enhanced secondary ion emission of Fe and Co by TOF-SIMS and ISS/DR 324 (1995) 338
Lee, K.D., see Kim 324 (1995) 8
Lennard, W.N., see Xia 324 (1995) 159
Leung, K.T., see MacPherson 324 (1995) 202
Liebsch, A., see Petukhov 324 (1995) L362
Linke, U., see Funtikov 324 (1995) L343

MacPherson, C.D. and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7×7: a LEED and TDS study 324 (1995) 202
Mainkar, N., see Qu 324 (1995) 133
Marinković, V., see Remškar 324 (1995) L367
Mårtensson, P., see Owman 324 (1995) 211
Masson, L., L. Barbier, J. Cousty and B. Salanon, Erratum to "Statistical analysis of STM images and measurement of the step–step interaction on Cu vicinal surfaces" [Surface Science 317 (1994) L1115] 324 (1995) L378
Massoumi, G.R., see Xia 324 (1995) 159
Michailov, M., see de Beauvais 324 (1995) 1
Mills, G., H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305
Mitsutake, K., J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106
Moggridge, G.D., see Schroeder 324 (1995) L371
Mönch, W., see Nienhaus 324 (1995) L328
Mönch, W., see Schmitsdorf 324 (1995) 249
Moon, D.W., see Lee 324 (1995) 338
Müller, K., see Schmiedl 324 (1995) 289
Mutaftschiev, B., see de Beauvais 324 (1995) 1

Nagahara, L.A., see Yang 324 (1995) L363
Nichtl-Pecher, W., see Schmiedl 324 (1995) 289
Nienhaus, H., T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328
Nishida, N., K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149
Nozoye, H., see Duszak 324 (1995) 257

Ohta, T., see Yokoyama 324 (1995) 25
Ohtani, F., see Duszak 324 (1995) 257
Ohyama, S., see Ito 324 (1995) 282
Ormerod, R.M., see Schroeder 324 (1995) L371
Owman, F. and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1×1-H surfaces 324 (1995) 211

Petukhov, A.V. and A. Liebsch, Erratum to "Theory of second harmonic generation from metal surfaces: frequency dependence and penetration depth of surface anisotropy of Al(111)" [Surface Science 320 (1994) L51] 324 (1995) L362
Pitt, I.G., R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69
Pourmir, F., S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier , Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337
Prodan, A., see Remškar 324 (1995) L367

Qu, Z., A. Goonewardene, K. Subramanian, J. Karunamuni, N. Mainkar, L. Ye, R.L. Stockbauer and R.L. Kurtz, Imaging the Fermi surface of Cu using photoelectron spectroscopy 324 (1995) 133

Rayment, T., see Schroeder 324 (1995) L371
Remškar, M., V. Marinković, A. Prodan and Z. Škraba, Intercalation of vacuum deposited silver into 1T-TaS_2 and its influence on charge density waves 324 (1995) L367
Roberts, J.T., see Chen 324 (1995) 169
Rousset, S., see Pourmir 324 (1995) L337
Rouxel, D., see de Beauvais 324 (1995) 1
Ryan, K.R., see Pitt 324 (1995) 69

Saiki, K., see Nishida 324 (1995) 149
Sakai, A., see Mitsutake 324 (1995) 106
Salanon, B., see Masson 324 (1995) L378
Schenter, G.K., see Mills 324 (1995) 305

Schmiedl, R., W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289
Schmitsdorf, R.F., T.U. Kampen and W. Mönch, Correlation between barrier height and interface structure of Ag/Si(111) Schottky diodes 324 (1995) 249
Schöchlin, J., K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113
Schroeder, S.L.M., G.D. Moggridge, R.M. Ormerod, T. Rayment and R.M. Lambert, What determines the probing depth of electron yield XAS? 324 (1995) L371
Scragg, G., see Kadodwala 324 (1995) 122
Shin, K.S., see Kim 324 (1995) 8
Shkrebtii, A.I., see Gavrilenko 324 (1995) 226
Škraba, Z., see Remškar 324 (1995) L367
Sotto, M., see Pourmir 324 (1995) L337
Souda, R., K. Yamamoto, W. Hayami, B. Tilley, T. Aizawa and Y. Ishizawa, Neutralization and negative-ion formation by impact of low-energy H^+ on ionic compound surfaces 324 (1995) L349
Spohn, H., see Hager 324 (1995) 365
Sprunger, P., F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321
Stensgaard, I., see Sprunger 324 (1995) L321
Stimming, U., see Funtikov 324 (1995) L343
Stockbauer, R.L., see Qu 324 (1995) 133
Subramanian, K., see Qu 324 (1995) 133

Takenaka, S., see Yokoyama 324 (1995) 25
Tateno, K., see Aruga 324 (1995) 17
Terada, S., see Yokoyama 324 (1995) 25
Tilley, B., see Souda 324 (1995) L349
Tonami, K., see Yang 324 (1995) L363
Tsukada, M., see Mitsutake 324 (1995) 106

Uehara, Y., see Ito 324 (1995) 282
Ushioda, S., see Ito 324 (1995) 282

van Eck, J.J.J., see Xia 324 (1995) 159
van Santen, R.A., see Burghgraef 324 (1995) 345
Verheij, L.K. and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185
Villarba, M. and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35
Vogel, R., see Funtikov 324 (1995) L343
Vvedensky, D.D., see Dudarev 324 (1995) L355

Wang, G.-C., see Jiang 324 (1995) 357
Wei, Y., see Yang 324 (1995) L363
Whelan, M.J., see Dudarev 324 (1995) L355
Wiederholt, T., H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91
Wintterlin, J., see Wiederholt 324 (1995) 91
Woodruff, D.P., see Kadodwala 324 (1995) 122

Xia, H., W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100)324 (1995) 159

Yagi, S., see Yokoyama 324 (1995) 25
Yamamoto, K., see Souda 324 (1995) L349
Yamauchi, J., see Mitsutake 324 (1995) 106
Yang, X.-M., K. Tonami, L.A. Nagahara, K. Hashimoto, Y. Wei and A. Fujishima, In-situ atomic force microscope observation of stripping of mercury from Hg/Au alloy films in acidic media 324 (1995) L363
Ye, L., see Qu 324 (1995) 133
Yokoyama, T., S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

ELSEVIER

Surface Science 324 (1995) 376–381

surface science

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Atom–solid interactions, scattering, diffraction

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

Atomistic dynamics

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

Computer simulations

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

G. Mills, H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305

Construction and use of effective interatomic interactions

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

Density functional calculations

K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

H. Burghgraef, A.P.J. Jansen and R.A. van Santen, Methane activation and dehydrogenation on nickel and cobalt: a computational study 324 (1995) 345

Electron–solid interactions, scattering, diffraction

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355

Equilibrium thermodynamics and statistical mechanics

G. Mills, H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305

Ion–solid interactions, scattering, channeling

R. Souda, K. Yamamoto, W. Hayami, B. Tilley, T. Aizawa and Y. Ishizawa, Neutralization and negative-ion formation by impact of low-energy H^+ on ionic compound surfaces 324 (1995) L349

Models of non-equilibrium phenomena

O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47

J. Hager and H. Spohn, Self-similar morphology and dynamics of periodic surface profiles below the roughening transition 324 (1995) 365

Models of surface chemical reactions

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

G. Mills, H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305

Models of surface kinetics

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355

O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

J. Hager and H. Spohn, Self-similar morphology and dynamics of periodic surface profiles below the roughening transition 324 (1995) 365

Molecular dynamics

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

Semi-empirical models and model calculations

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atom–solid scattering and diffraction – elastic

C. de Beauvais, D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of c(2 × 2)-Pb/Cu(110) 324 (1995) 1
L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185

Atomic force microscopy

X.-M. Yang, K. Tonami, L.A. Nagahara, K. Hashimoto, Y. Wei and A. Fujishima, In-situ atomic force microscope observation of stripping of mercury from Hg/Au alloy films in acidic media 324 (1995) L363
M. Ge and A.A. Gewirth, In situ atomic force microscopy of under- and overpotentially deposited cadmium on Cu(111) 324 (1995) 140

Auger electron spectroscopy

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

Chemical vapor deposition

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

Electrochemical methods

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343
S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Electron energy loss spectroscopy

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

Electron microscopy

M. Remškar, V. Marinković, A. Prodan and Z. Škraba, Intercalation of vacuum deposited silver into 1T-TaS_2 and its influence on charge density aves 324 (1995) L367

Scanning electron microscopy (SEM)

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

Electron–solid diffraction

Low energy electron diffraction (LEED)

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337
C.Y. Kim, K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8
T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17
L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233
R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289
Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1 × 1 films 324 (1995) 357

Reflection high-energy electron diffraction (RHEED)

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

Ion etching

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Ion scattering spectroscopy

R. Duszak, F. Ohtani, Y. Kadowaki and H. Nozoye, Quantitative determination of the imperfectness of a cleaved MoS_2(001) surface by coaxial impact-collision ion scattering 324 (1995) 257

High energy ion scattering (HEIS)

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

Molecular beam epitaxy

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

Molecule–solid reactions

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Non-linear optical methods

Second harmonic generation

A.V. Petukhov and A. Liebsch, Erratum to "Theory of second harmonic generation from metal surfaces: frequency dependence and penetration depth of surface anisotropy of Al(111)" [Surface Science 320 (1994) L51] 324 (1995) L362

Photoelectron spectroscopy

Z. Qu, A. Goonewardene, K. Subramanian, J. Karunamuni, N. Mainkar, L. Ye, R.L. Stockbauer and R.L. Kurtz, Imaging the Fermi surface of Cu using photoelectron spectroscopy 324 (1995) 133

X-ray photoelectron spectroscopy

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Photon absorption spectroscopy

Near edge extended X-ray absorption fine structure (NEXAFS)

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

Surface extended X-ray absorption fine structure (SEXAFS)

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

X-ray absorption spectroscopy

S.L.M. Schroeder, G.D. Moggridge, R.M. Ormerod, T. Rayment and R.M. Lambert, What determines the probing depth of electron yield XAS? 324 (1995) L371

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

Raman scattering spectroscopy

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

Reflection spectroscopy

V.I. Gavrilenko and A.I. Shkrebtii, Anisotropy of optical reflectance of the (001) surface of diamond 324 (1995) 226

Scanning tunneling microscopy

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectroscopy of surface micro-structures on granular Au films 324 (1995) 282

Solid phase epitaxy

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

Thermal desorption spectroscopy

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289

Work function measurements

C.Y. Kim, K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8

PHENOMENA

Adsorption kinetics

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185
C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202
R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289
G. Mills, H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305

Catalysis

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

Chemisorption

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321
T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17
T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25
T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91
K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106
M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122
W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169
C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202
F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211
L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233
G. Mills, H. Jónsson and G.K. Schenter, Reversible work transition state theory: application to dissociative adsorption of hydrogen 324 (1995) 305
H. Burghgraef, A.P.J. Jansen and R.A. van Santen, Methane activation and dehydrogenation on nickel and cobalt: a computational study 324 (1995) 345

Compound formation

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

Dielectric phenomena

V.I. Gavrilenko and A.I. Shkrebtii, Anisotropy of optical reflectance of the (001) surface of diamond 324 (1995) 226

Electron–solid interactions

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

Epitaxy

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

Etching

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233
S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Faceting

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

Growth

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333
S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355
C. de Beauvais, D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of c(2 × 2)-Pb/Cu(110) 324 (1995) 1
M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35
O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47
Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1 × 1 films 324 (1995) 357

Interface states

N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

Ion emission

J.C. Lee, H.J. Kang, K.J. Kim, Y.S. Kim and D.W. Moon, Oxygen enhanced secondary ion emission of Fe and Co by TOF-SIMS and ISS/DR 324 (1995) 338

Ion–solid interactions

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

Oxidation

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Second harmonic generation

A.V. Petukhov and A. Liebsch, Erratum to "Theory of second harmonic generation from metal surfaces: frequency dependence and penetration depth of surface anisotropy of Al(111)" [Surface Science 320 (1994) L51] 324 (1995) L362

Sticking

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

Surface chemical reaction

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

Surface diffusion

I.G. Pitt, R.G. Gilbert and K.R. Ryan, The effects of adsorbate island formation on extrinsic precursor kinetics 324 (1995) 69

Surface electronic phenomena (work function, surface potential, surface states, etc.)

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

Surface energy

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

Surface relaxation and reconstruction

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

C.Y. Kim, K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

Surface stress

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

Surface structure, morphology, roughness, and topography

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3}$ × $\sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

R. Duszak, F. Ohtani, Y. Kadowaki and H. Nozoye, Quantitative determination of the imperfectness of a cleaved MoS_2(001) surface by coaxial impact-collision ion scattering 324 (1995) 257

Surface thermodynamics (including phase transitions)

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289

Surface waves

Phonons

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

Plasmons

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectroscopy of surface micro-structures on granular Au films 324 (1995) 282

Thermal desorption

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

Tunneling

M. Remškar, V. Marinković, A. Prodan and Z. Škraba, Intercalation of vacuum deposited silver into 1T-TaS_2 and its influence on charge density aves 324 (1995) L367

L. Masson, L. Barbier, J. Cousty and B. Salanon, Erratum to "Statistical analysis of STM images and measurement of the step–step interaction on Cu vicinal surfaces" [Surface Science 317 (1994) L1115] 324 (1995) L378

Vibrations of adsorbed molecules

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

ELSEVIER

Surface Science 324 (1995) 382–386

surface science

Materials index

ELEMENTAL AND CHEMICAL IDENTITY

Elements

Alkali metals

C.Y. Kim, K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8

Aluminum

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

b

A.V. Petukhov and A. Liebsch, Erratum to "Theory of second harmonic generation from metal surfaces: frequency dependence and penetration depth of surface anisotropy of Al(111)" [Surface Science 320 (1994) L51] 324 (1995) L362

Bromine

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

Cadmium

M. Ge and A.A. Gewirth, In situ atomic force microscopy of under- and overpotentially deposited cadmium on Cu(111) 324 (1995) 140

Chalcogens

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

Chlorine

K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/ Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Cobalt

J.C. Lee, H.J. Kang, K.J. Kim, Y.S. Kim and D.W. Moon, Oxygen enhanced secondary ion emission of Fe and Co by TOF-SIMS and ISS/DR 324 (1995) 338

Copper

C. de Beauvais, D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of c(2 × 2)-Pb/Cu(110) 324 (1995) 1

O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47

L. Masson, L. Barbier, J. Cousty and B. Salanon, Erratum to "Statistical analysis of STM images and measurement of the step–step interaction on Cu vicinal surfaces" [Surface Science 317 (1994) L1115] 324 (1995) L378

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

Z. Qu, A. Goonewardene, K. Subramanian, J. Karunamuni, N. Mainkar, L. Ye, R.L. Stockbauer and R.L. Kurtz, Imaging the Fermi surface of Cu using photoelectron spectroscopy 324 (1995) 133

M. Ge and A.A. Gewirth, In situ atomic force microscopy of under- and overpotentially deposited cadmium on Cu(111) 324 (1995) 140

Diamond

V.I. Gavrilenko and A.I. Shkrebtii, Anisotropy of optical reflectance of the (001) surface of diamond 324 (1995) 226

Germanium

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

Gold

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

X.-M. Yang, K. Tonami, L.A. Nagahara, K. Hashimoto, Y. Wei and A. Fujishima, In-situ atomic force microscope observation of stripping of mercury from Hg/Au alloy films in acidic media 324 (1995) L363

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectroscopy of surface micro-structures on granular Au films 324 (1995) 282

Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1 × 1 films 324 (1995) 357

Hydrogen

L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289

Iron

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289

J.C. Lee, H.J. Kang, K.J. Kim, Y.S. Kim and D.W. Moon, Oxygen enhanced secondary ion emission of Fe and Co by TOF-SIMS and ISS/DR 324 (1995) 338

Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1 × 1 films 324 (1995) 357

Lead

C. de Beauvais, D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of c(2 × 2)-Pb/Cu(110) 324 (1995) 1

Mercury

X.-M. Yang, K. Tonami, L.A. Nagahara, K. Hashimoto, Y. Wei and A. Fujishima, In-situ atomic force microscope observation of stripping of mercury from Hg/Au alloy films in acidic media 324 (1995) L363

Molybdenum

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

Nickel

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

S.L.M. Schroeder, G.D. Moggridge, R.M. Ormerod, T. Rayment and R.M. Lambert, What determines the probing depth of electron yield XAS? 324 (1995) L371

Nitrogen

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

Platinum

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185

Rhenium

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

Silicon

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

C.Y. Kim, K.S. Shin, K.D. Lee and J.W. Chung, Lithium-induced reconstructions of the Si(001) surface 324 (1995) 8

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

R.F. Schmitsdorf, T.U. Kampen and W. Mönch, Correlation between barrier height and interface structure of Ag/Si(111) Schottky diodes 324 (1995) 249

Silver

M. Remškar, V. Marinković, A. Prodan and Z. Škraba, Intercalation of vacuum deposited silver into 1T-TaS_2 and its influence on charge density aves 324 (1995) L367

R.F. Schmitsdorf, T.U. Kampen and W. Mönch, Correlation between barrier height and interface structure of Ag/Si(111) Schottky diodes 324 (1995) 249

Tantalum

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Tungsten

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

Compounds (non-molecular solids)

Alkali halides

R. Souda, K. Yamamoto, W. Hayami, B. Tilley, T. Aizawa and Y. Ishizawa, Neutralization and negative-ion formation by impact of low-energy H^+ on ionic compound surfaces 324 (1995) L349

Gallium arsenide

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

Halides

N. Nishida, K. Saiki and A. Koma, Heteroepitaxy of CuCl on GaAs and Si substrates 324 (1995) 149

Lead sulfide

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Nickel oxides

S.L.M. Schroeder, G.D. Moggridge, R.M. Ormerod, T. Rayment and R.M. Lambert, What determines the probing depth of electron yield XAS? 324 (1995) L371

Silicon carbide

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

Sulfides

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

Sulphides

M. Remškar, V. Marinković, A. Prodan and Z. Škraba, Intercalation of vacuum deposited silver into 1T-TaS_2 and its influence on charge density aves 324 (1995) L367

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

R. Duszak, F. Ohtani, Y. Kadowaki and H. Nozoye, Quantitative determination of the imperfectness of a cleaved MoS_2(001) surface by coaxial impact-collision ion scattering 324 (1995) 257

Molecules

Ammonia

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

Aromatics

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

Carbon monoxide

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

Halogens

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

Metal halides

W. Chen and J.T. Roberts, Adsorption and reaction of WF_6 on W(100) 324 (1995) 169

Oxygen

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

Sulphur dioxide

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

PHYSICAL STATE

Surfaces

Amorphous surfaces

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

Single crystal surfaces

R. Schmiedl, W. Nichtl-Pecher, L. Hammer, K. Heinz and K. Müller, Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties 324 (1995) 289

Low index single crystal surfaces

P. Sprunger, F. Besenbacher and I. Stensgaard, STM study of the Ni(110)-(2 × 1)-2CO system: structure and bonding-site determination 324 (1995) L321

H. Nienhaus, T.U. Kampen and W. Mönch, Phonons in 3C-, 4H-, and 6H-SiC 324 (1995) L328

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343

C. de Beauvais, D. Rouxel, M. Michailov and B. Mutaftschiev, Two-dimensional overgrowth in the low submonolayer range: the case of c(2 × 2)-Pb/Cu(110) 324 (1995) 1

T. Aruga, K. Tateno, K. Fukui and Y. Iwasawa, Restraint of NH_3 dissociation on oxygen-modified Mo(112) 324 (1995) 17

T. Yokoyama, S. Terada, S. Yagi, A. Imanishi, S. Takenaka, Y. Kitajima and T. Ohta, Surface structures and electronic properties of SO_2 adsorbed on Ni(111) and Ni(100) studied by S K-edge X-ray absorption fine structure spectroscopy 324 (1995) 25

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47

T. Wiederholt, H. Brune, J. Wintterlin, R.J. Behm and G. Ertl, Formation of two-dimensional sulfide phases on Al(111): an STM study 324 (1995) 91

K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

J. Schöchlin, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Al(111)-surface 324 (1995) 113

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

H. Xia, W.N. Lennard, G.R. Massoumi, J.J.J. van Eck, L.J. Huang, W.M. Lau and D. Landheer, Absolute coverage measurements on sulphur-passivated GaAs(100) 324 (1995) 159

L.K. Verheij and M.B. Hugenschmidt, Hydrogen adsorption on oxygen covered Pt(111) 324 (1995) 185

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

L.A. DeLouise, Investigation of the chemical mechanisms of Ta(110)/Ta(110)-suboxide etch selectivity using Cl_2 molecular beams 324 (1995) 233

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Vicinal single crystal surfaces

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337

Surface defects

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

L. Masson, L. Barbier, J. Cousty and B. Salanon, Erratum to "Statistical analysis of STM images and measurement of the step–step interaction on Cu vicinal surfaces" [Surface Science 317 (1994) L1115] 324 (1995) L378

F. Owman and P. Mårtensson, STM study of structural defects on in situ prepared Si(111)1 × 1-H surfaces 324 (1995) 211

Interfaces

Single crystal epitaxy

Y. Homma, H. Hibino and N. Aizawa, Direct evidence for Ge preferential growth at steps and out-of-phase boundaries of (7 × 7) domains on Si(111) in solid phase epitaxy 324 (1995) L333

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355

O. Biham, G.T. Barkema and M. Breeman, Rate equations for the growth of Cu islands on Cu(001) 324 (1995) 47

Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1 × 1 films 324 (1995) 357

Solid–gas interfaces

F.Y. Hansen, N.E. Henriksen and G.D. Billing, New insight in the microscopic mechanism of the catalytic synthesis of ammonia 324 (1995) 55

C.D. MacPherson and K.T. Leung, Electron-induced chemistry of pyridine on Si(111)7 × 7: a LEED and TDS study 324 (1995) 202

J. Hager and H. Spohn, Self-similar morphology and dynamics of periodic surface profiles below the roughening transition 324 (1995) 365

Solid–liquid interfaces

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Adatoms

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

M.F. Kadodwala, A.A. Davis, G. Scragg, B.C.C. Cowie, M. Kerkar, D.P. Woodruff and R.G. Jones, Structural determination of the Cu(111)-($\sqrt{3} \times \sqrt{3}$)R30°-Cl/Br surface using the normal incidence X-ray standing wave method 324 (1995) 122

Clusters

H. Burghgraef, A.P.J. Jansen and R.A. van Santen, Methane activation and dehydrogenation on nickel and cobalt: a computational study 324 (1995) 345

ELECTRICAL AND MAGNETIC BEHAVIOR

Surfaces and / or films

Metallic films

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectroscopy of surface micro-structures on granular Au films 324 (1995) 282

Metallic surfaces

F. Pourmir, S. Rousset, S. Gauthier, M. Sotto, J. Klein, J. Lecoeur and J.P. Bellier, Superperiodicity in the thermal faceting of Au(111) vicinal surfaces 324 (1995) L337
K. Mitsutake, J. Yamauchi, A. Sakai and M. Tsukada, Theoretical study of dissociative adsorption of Cl_2 on the Al surface 324 (1995) 106

Semiconducting surfaces

S.L. Dudarev, D.D. Vvedensky and M.J. Whelan, Dynamical electron scattering from growing surfaces 324 (1995) L355

Interfaces

Metal–electrolyte interfaces

A.M. Funtikov, U. Linke, U. Stimming and R. Vogel, An in-situ STM study of anion adsorption on Pt(111) from sulfuric acid solutions 324 (1995) L343
X.-M. Yang, K. Tonami, L.A. Nagahara, K. Hashimoto, Y. Wei and A. Fujishima, In-situ atomic force microscope observation of stripping of mercury from Hg/Au alloy films in acidic media 324 (1995) L363

Metal–semiconductor interfaces

R.F. Schmitsdorf, T.U. Kampen and W. Mönch, Correlation between barrier height and interface structure of Ag/Si(111) Schottky diodes 324 (1995) 249

Schottky barrier

R.F. Schmitsdorf, T.U. Kampen and W. Mönch, Correlation between barrier height and interface structure of Ag/Si(111) Schottky diodes 324 (1995) 249

Semiconductor–electrolyte interfaces

S.R. Higgins and R.J. Hamers, Spatially-resolved electrochemistry of the lead sulfide (galena) (001) surface by electrochemical scanning tunneling microscopy 324 (1995) 263

Heterostructures and thin film structures

Metal–metal magnetic thin film structures

Q. Jiang and G.-C. Wang, Scaling of island size distribution and island coalescence in monolayer epitaxial growth of 1×1 films 324 (1995) 357

Metal–metal nonmagnetic heterostructures

M. Villarba and H. Jónsson, Atomic exchange processes in sputter deposition of Pt on Pt(111) 324 (1995) 35

Instructions for Authors Concerning the Use of Keywords for Indexing in Surface Science

Given below is a listing of keywords for the Subject and Materials Indexes used by Surface Science. The Subject index is divided into three classes: Theoretical Methods, Experimental Methods, and Phenomena. Please indicate below your abstract at least one keyword from as many of the three classes as appropriate to describe the contents of your manuscript. (You may also tick the appropriate box and include this list with your manuscript.) Occasionally it will not be possible to include a keyword from all three classes, e.g., a general theory manuscript will not exhibit a keyword from the Experimental Methods class. In such a case, omit the entry from the inapplicable class. Also, if appropriate, please select a keyword from one of the three classes of the Materials Index, i.e., Elemental and Chemical Identity, Physical State, and Electrical and Magnetic Behavior. You may use multiple keywords in the above mentioned six classes up to a maximum of eight in total. For example, many experimental papers will be characterized by more than one keyword in the Experimental Methods class of the Subject Index as well as by several keywords from the Materials Index.

The keywords will be used as labels for the use in electronic navigation tools. Thus, careful attention to giving a correct, useful description of your work will generate more thorough use of your paper once it is published.

Subject index

Theoretical methods, models and techniques

- ☐ Ab initio quantum chemical methods and calculations
- ☐ Atom–solid interactions, scattering, diffraction
- ☐ Atomistic dynamics
- ☐ Computer simulations
- ☐ Construction and use of effective interatomic interactions
- ☐ Density functional calculations
- ☐ Electron density, excitation spectra calculations
- ☐ Electron–solid interactions, scattering, diffraction
- ☐ Equilibrium thermodynamics and statistical mechanics
- ☐ Green's function methods
- ☐ Ion–solid interactions, scattering, channeling
- ☐ Ising models
- ☐ Jellium models
- ☐ Many body and quasi-particle theories
- ☐ Models of non-equilibrium phenomena
- ☐ Models of non-linear phenomena
- ☐ Models of surface chemical reactions
- ☐ Models of surface kinetics
- ☐ Molecular dynamics
- ☐ Non-equilibrium thermodynamics and statistical mechanics
- ☐ Semi-empirical models and model calculations

Experimental sample preparation and characterization methods

- ☐ Adsorption isotherms
- ☐ Appearance potential spectroscopy
- ☐ Atom–solid reactions
- ☐ Atom–solid scattering and diffraction – elastic
- ☐ Atom–solid scattering and diffraction – inelastic
- ☐ Atomic force microscopy
- ☐ Auger electron spectroscopy
- ☐ Chemical vapor deposition
- ☐ Desorption induced by electronic transitions (DIET)
  - ☐ *Angle resolved DIET* (including electron stimulated desorption ion angular distribution (ESDIAD))
  - ☐ *Electron stimulated desorption (ESD)*
  - ☐ *Photon stimulated desorption (PSD)*
  - ☐ *Surface photochemistry*
- ☐ Electrical transport measurements
- ☐ Electrochemical methods
- ☐ Electron emission measurements
  - ☐ *Exoelectron emission*
  - ☐ *Field emission*
  - ☐ *Photoemission (total yield)*
  - ☐ *Secondary electron emission*
  - ☐ *Thermally-stimulated emission*
- ☐ Electron energy loss spectroscopy
- ☐ Electron microscopy
  - ☐ *Ballistic electron emission microscopy (BEEM)*
  - ☐ *Low-energy electron microscopy (LEEM)*
  - ☐ *Reflection electron microscopy (REM)*
  - ☐ *Scanning electron microscopy (SEM)*
  - ☐ *Scanning transmission electron microscopy (STEM)*
- ☐ Electron–solid diffraction
  - ☐ *Auger electron diffraction*
  - ☐ *Low energy electron diffraction (LEED)*
  - ☐ *Photoelectron diffraction*
  - ☐ *Photoelectron holography*
  - ☐ *Reflection high-energy electron diffraction (RHEED)*
  - ☐ *Transmission high-energy electron diffraction*
- ☐ Electron–solid scattering and transmission – elastic
- ☐ Electron–solid scattering and transmission – inelastic
- ☐ Electron spin resonance
- ☐ Ellipsometry
- ☐ Field emission microscopy
- ☐ Field emission spectroscopy

- ☐ Field ion microscopy
- ☐ Inverse photoemission spectroscopy
- ☐ Ion etching
- ☐ Ion implantation
- ☐ Ion scattering spectroscopy
  - ☐ *High energy ion scattering (HEIS)*
  - ☐ *Low energy ion scattering (LEIS)*
  - ☐ *Medium energy ion scattering (MEIS)*
- ☐ Isotopic exchange/traces
- ☐ Laser methods
  - ☐ *Laser annealing*
  - ☐ *Laser induced thermal desorption (LITD)*
  - ☐ *Resonance enhanced multiphoton ionization mass spectroscopy (REMPI/MS)*
- ☐ Liquid phase epitaxy
- ☐ Magnetic measurements
- ☐ Molecular beam epitaxy
- ☐ Molecule–solid reactions
- ☐ Molecule–solid scattering and diffraction – elastic
- ☐ Molecule–solid scattering and diffraction – inelastic
- ☐ Mössbauer spectroscopy
- ☐ Neutron scattering
- ☐ Non-linear optical methods
  - ☐ *Second harmonic generation*
  - ☐ *Sum frequency generation*
- ☐ Nuclear magnetic resonance
- ☐ Nuclear reaction analysis
- ☐ Photoelectron spectroscopy
  - ☐ *Angle resolved photoemission*
  - ☐ *Soft X-ray photoelectron spectroscopy (using synchrotron radiation)*
  - ☐ *Visible and ultraviolet photoelectron spectroscopy*
  - ☐ *X-ray photoelectron spectroscopy*
- ☐ Photon absorption spectroscopy
  - ☐ *Extended X-ray absorption fine structure (EXAFS)*
  - ☐ *Infrared absorption spectroscopy*
  - ☐ *Near edge extended X-ray absorption fine structure (NEXAFS)*
  - ☐ *Photoacoustic spectroscopy*
  - ☐ *Visible/ultraviolet absorption spectroscopy*
  - ☐ *Surface extended X-ray absorption fine structure (SEXAFS)*
  - ☐ *X-ray absorption spectroscopy*
- ☐ Photon stimulated desorption (non-electronic)
- ☐ Plasma processing
- ☐ Positron spectroscopy
- ☐ Radioactive tracer methods
- ☐ Raman scattering spectroscopy
- ☐ Reflection spectroscopy
- ☐ Scanning tunneling microscopy
- ☐ Scanning tunneling spectroscopies
- ☐ Secondary ion mass spectroscopy
- ☐ Solid phase epitaxy
- ☐ Sputter deposition
- ☐ Surface photovoltage spectroscopy
- ☐ Thermal desorption spectroscopy
- ☐ Work function measurements
- ☐ X-ray emission
- ☐ X-ray scattering, diffraction, and reflection

Phenomena

- ☐ Adhesion
- ☐ Adsorption kinetics
- ☐ Atom emission
- ☐ Atom–solid interactions
- ☐ Auger ejection
- ☐ Catalysis
- ☐ Chemisorption
- ☐ Compound formation
- ☐ Conductivity
- ☐ Corrosion
- ☐ Crystallization
- ☐ Dielectric phenomena
- ☐ Diffusion and migration
- ☐ Electrical transport (conductivity, resistivity, mobility, etc.)
- ☐ Electron bombardment
- ☐ Electron emission
- ☐ Electron–solid interactions
- ☐ Electron stimulated desorption
- ☐ Energy dissipation
- ☐ Epitaxy
- ☐ Etching
- ☐ Evaporation and sublimation
- ☐ Faceting
- ☐ Field effect
- ☐ Field emission
- ☐ Field evaporation
- ☐ Field ionization
- ☐ Friction
- ☐ Growth
- ☐ Hall effect
- ☐ Interface states
- ☐ Ion bombardment
- ☐ Ion emission
- ☐ Ion implantation
- ☐ Ion–solid interactions
- ☐ Light scattering
- ☐ Lubrication
- ☐ Luminescence
  - ☐ *Atom/ion stimulated luminescence*
  - ☐ *Chemiluminescence*
  - ☐ *Electroluminescence*
  - ☐ *Photoluminescence*
- ☐ Magnetic phenomena (cyclotron resonance, phase transitions, etc.)
- ☐ Nucleation
- ☐ Oxidation
- ☐ Photochemistry
- ☐ Photoconductivity
- ☐ Photoelectron diffraction
- ☐ Photoelectron emission
- ☐ Photon emission
- ☐ Photon stimulated desorption
- ☐ Physical adsorption
- ☐ Piezoelectric effect
- ☐ Positron–solid interactions
- ☐ Quantum effects
- ☐ Radiation damage
- ☐ Second harmonic generation
- ☐ Secondary electron emission
- ☐ Self-assembly
- ☐ Sintering
- ☐ Sputtering
- ☐ Sticking
- ☐ Superconductivity
- ☐ Surface chemical reaction
- ☐ Surface diffusion
- ☐ Surface electrical transport (surface conductivity, surface recombination, etc.)
- ☐ Surface electronic phenomena (work function, surface potential, surface states, etc.)
- ☐ Surface energy
- ☐ Surface melting
- ☐ Surface photovoltage
- ☐ Surface relaxation and reconstruction
- ☐ Surface roughening
- ☐ Surface segregation
- ☐ Surface stress
- ☐ Surface structure, morphology, roughness, and topography
- ☐ Surface tension
- ☐ Surface thermodynamics (including phase transitions)
- ☐ Surface waves
  - ☐ *Acoustic waves*
  - ☐ *Capillary waves*
  - ☐ *Magnons*
  - ☐ *Phonons*
  - ☐ *Plasmons*
  - ☐ *Polaritons*
- ☐ Thermal desorption
- ☐ Thermionic emission
- ☐ Tribology
- ☐ Tunneling
- ☐ Vibrations of adsorbed molecules
- ☐ Wetting

Materials index

ELEMENTAL AND CHEMICAL IDENTITY
(Include each component of an interface or multilayer structure as a separate category. Add your own specific elemental or chemical label if a suitable entry is not on the list.)

Elements

- ☐ Alkali metals
- ☐ Alkaline earth metals
- ☐ Aluminum
- ☐ Antimony
- ☐ Arsenic
- ☐ Bismuth
- ☐ Boron
- ☐ Bromine
- ☐ Cadmium
- ☐ Carbon
- ☐ Cerium
- ☐ Chalcogens
- ☐ Chlorine
- ☐ Chromium
- ☐ Cobalt
- ☐ Copper
- ☐ Diamond
- ☐ Gallium
- ☐ Germanium
- ☐ Gold
- ☐ Graphite
- ☐ Hafnium
- ☐ Hydrogen
- ☐ Indium
- ☐ Iodine
- ☐ Iridium
- ☐ Iron
- ☐ Lanthanides
- ☐ Lead
- ☐ Manganese
- ☐ Mercury
- ☐ Molybdenum
- ☐ Nickel
- ☐ Niobium
- ☐ Nitrogen
- ☐ Noble gases
- ☐ Osmium
- ☐ Palladium
- ☐ Phosphorus
- ☐ Platinum
- ☐ Rhenium
- ☐ Rhodium
- ☐ Ruthenium
- ☐ Scandium
- ☐ Silicon
- ☐ Silver
- ☐ Tantalum
- ☐ Technetium
- ☐ Thallium
- ☐ Thorium
- ☐ Tin
- ☐ Titanium
- ☐ Tungsten
- ☐ Uranium
- ☐ Vanadium
- ☐ Ytterbium
- ☐ Yttrium
- ☐ Zinc
- ☐ Zirconium
- ☐ Other .....*

Compounds (non-molecular solids)

- ☐ Alkali halides
- ☐ Alloys
- ☐ Aluminum oxide
- ☐ Barium oxide
- ☐ Biological compounds
- ☐ Borides
- ☐ Boron nitride
- ☐ Cadmium selenide
- ☐ Cadmium sulphide
- ☐ Cadmium telluride
- ☐ Carbides
- ☐ Cobalt oxides
- ☐ Copper oxides
- ☐ Gallium antimonide
- ☐ Gallium arsenide
- ☐ Gallium nitride
- ☐ Gallium phosphide
- ☐ Gallium selenide
- ☐ Halides
- ☐ Hydrides
- ☐ Indium antimonide
- ☐ Indium arsenide
- ☐ Indium oxides
- ☐ Indium phosphide
- ☐ Inorganic compounds
- ☐ Iron oxide
- ☐ Lead telluride
- ☐ Magnesium oxides
- ☐ Mercury telluride
- ☐ Mica
- ☐ Molybdenum oxides
- ☐ Nickel carbide
- ☐ Nickel oxides
- ☐ Nickel sulphide
- ☐ Nitrides
- ☐ Silicides
- ☐ Silicon carbide
- ☐ Silicon–germanium
- ☐ Silicon nitride
- ☐ Silicon oxides
- ☐ Steel
- ☐ Sulphides
- ☐ Tin oxides
- ☐ Tin telluride
- ☐ Titanium carbide
- ☐ Titanium oxide
- ☐ Tungsten oxide
- ☐ Uranium oxide
- ☐ Vanadium oxide
- ☐ Zeolites
- ☐ Zinc oxide
- ☐ Zinc selenide
- ☐ Other .....*

Molecules

- ☐ Alcohols
- ☐ Aldehydes
- ☐ Alkanes
- ☐ Alkenes
- ☐ Alkynes
- ☐ Ammonia
- ☐ Aromatics
- ☐ Biological molecules – nucleic acids
- ☐ Biological molecules – proteins
- ☐ Biological molecules – other .....*
- ☐ Carbon dioxide
- ☐ Carbon monoxide
- ☐ Carboxylic acid
- ☐ Cyanogen
- ☐ Deuterium
- ☐ Esters
- ☐ Ethers
- ☐ Fullerenes
- ☐ Halogens
- ☐ Hydrogen
- ☐ Hydrogen cyanide
- ☐ Hydrogen sulphide
- ☐ Ketones
- ☐ Nitrogen
- ☐ Nitrogen oxides
- ☐ Oxygen
- ☐ Ozone
- ☐ Phosphine
- ☐ Silane
- ☐ Sulphur dioxide
- ☐ Sulphur hexafluoride
- ☐ Water
- ☐ Other .....*

PHYSICAL STATE

Surfaces

- ☐ Amorphous surfaces
- ☐ Dendritic and/or fractile surfaces
- ☐ Glass surfaces
- ☐ Liquid surfaces
- ☐ Polycrystalline surfaces

- ☐ Single crystal surfaces
  - ☐ *Low index single crystal surfaces*
  - ☐ *Stepped single crystal surfaces*
  - ☐ *Vicinal single crystal surfaces*
- ☐ Surface defects
- ☐ Whiskers

Interfaces
- ☐ Crystalline–amorphous interfaces
- ☐ Crystalline–glass interfaces
- ☐ Grain boundaries
- ☐ Liquid–gas interfaces
- ☐ Single crystal epitaxy
- ☐ Solid–liquid interfaces
- ☐ Solid–gas interfaces

Heterostructures
- ☐ Heterojunctions
- ☐ Quantum wells
- ☐ Superlattices

Non-epitaxial thin film structures
- ☐ Amorphous thin films
- ☐ Ceramic thin films
- ☐ Glassy thin films
- ☐ Polycrystalline thin films

☐ **Adatoms**

☐ **Clusters**

Particulate composites
- ☐ Blacks
- ☐ Ceramics
- ☐ Powders

☐ **Coatings**

☐ **Porous solids**

ELECTRICAL AND MAGNETIC BEHAVIOR

Surfaces and/or films
- ☐ Insulating films
- ☐ Insulating surfaces
- ☐ Magnetic films
- ☐ Magnetic surfaces
- ☐ Metallic films
- ☐ Metallic surfaces
- ☐ Semiconducting films
- ☐ Semiconducting surfaces
- ☐ Superconducting films
- ☐ Superconducting surfaces

Interfaces
- ☐ Magnetic interfaces
- ☐ Metal–electrolyte interfaces
- ☐ Metal–insulator interfaces
- ☐ Metal–metal interfaces
- ☐ Metal–semiconductor interfaces
- ☐ Schottky barrier
- ☐ Semiconductor–electrolyte interfaces
- ☐ Semiconductor–insulator interfaces
- ☐ Semiconductor–semiconductor interfaces
- ☐ Semiconductor–superconductor interfaces
- ☐ Other interfaces .....*

Heterostructures and thin film structures
- ☐ Metal–metal magnetic heterostructures
- ☐ Metal–metal magnetic thin film structures
- ☐ Metal–metal nonmagnetic heterostructures
- ☐ Metal–metal nonmagnetic thin film structures
- ☐ Metal–oxide–semiconductor (MOS) structures
- ☐ Metal–semiconductor magnetic heterostructures
- ☐ Metal–semiconductor magnetic thin film structures
- ☐ Metal–semiconductor nonmagnetic heterostructures
- ☐ Metal–semiconductor nonmagnetic thin film structures
- ☐ Semiconductor–semiconductor heterostructures
- ☐ Semiconductor–semiconductor thin film structures
- ☐ Superconductor–semiconductor heterostructures
- ☐ Superconductor–semiconductor thin film structures
- ☐ Other heterostructures .....*
- ☐ Other thin film structures .....*

☐ **Contacts**

*Please, fill in necessary new Materials Index Keyword. If the new keyword is indicated on the manuscript, please, make clear to which subcategory it belongs.